Docket No. 2001P15152WOUS

CERTIFICATION OF ATTACHED ENGLISH TRANSLATION OF PCT APPLICATION:

PCT/EP02/09397 BASED ON DE 10142245.8,
Filed August 29, 2001

I hereby certify the English translation attached is a true and accurate copy of the referenced application PCT/EP02/09397.

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Reg No 26,822

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FRUIT PRESS

The present invention relates to a fruit press comprising a centrally arranged, projecting element which tapers to the top for the pressing of a fruit and an annular surface surrounding the base of said element, whereby the element has ridges on its outer surface, running from the base of the element upwards, between which trough-shaped recesses are arranged.

Such fruit presses are generally known. Their purpose is to squeeze lemons, oranges, grapefruit and the like. With fruit presses, independently of whether they are manual or motor-driven presses, there is the problem of squeezing out the fruit juice from the fruit as completely as possible.

EP 0 362 058 B1 discloses a fruit press driven by an electromotor. In this fruit press there are spiral-shaped ribs provided on an outer surface, which rise as narrow strips above an also rotationally symmetrical outer surface.

It is the object of the present invention to improve on the known fruit press.

According to the present invention a fruit press of the type initially specified, in that the ridges and the recesses are arranged helically, solves this task.

With ridges being provided according to the present invention, edges are made available which are sufficiently sharp to tear off the walls between the fruit-containing cells of the fruit, so that fruit juice runs out. Due to the trough-shaped recesses between the ridges there is enough space to ensure that the fruit juice can escape.

The helical arrangement of the ridges gives rise to a screw-like effect, which is why the element rotates into the fruit during the pressing procedure. This supports the pressing procedure. The user of the fruit press can press the fruit by exerting minimal pressure against the element. Due to the helical arrangement of the ridges the fruit flesh is squeezed out without tearing. This aids in boosting the juice yield during pressing of the fruit, while at the same time the work effort is reduced.

Advantageous further developments will emerge from the sub-claims.

A particularly advantageous further development is that the element is designed substantially conical and the ridges run up to a central upper tip on the element.

Because of this particular shape of the element the form of the inner walls of the fruit peel, in particular a lemon is adapted. When all the juice is squeezed out of the fruit the ridges scrape against the inner walls of the fruit, such that all the juice is pressed out of it.

By way of advantage the fruit press is configured such that the element is substantially hollow in its interior and has a hollow shaft for slipping onto a journal of a drive shaft. This shape is suitable if the fruit press is driven by motor. Due to the hollow shaft a rapid connection can be made with the drive shaft of the motor. On the other hand the element can easily be removed from the drive shaft along with then annular surface surrounding it, for cleaning.

By way of advantage walls are arranged between the hollow shaft and an outer wall having the outer surface on its outer side. This particular measure increases the stability of the fruit press. The element is not deformed, if a fruit is pressed against the element under high force to extract the juice.

For the drive shaft to be taken up distortion-free by the hollow shaft, the hollow shaft is fitted with an angular cross-section, for example a hexagonal cross-section and thus has a hexagonal wall.

It is of advantage if the walls in the element adjoin the edges of the hollow shaft at a right angle. The purpose of this measure is also to lend considerable stability to the element.

An embodiment of the invention will now be explained in greater detail with reference to the diagram, in which:

Figure 1 shows a fruit press in cross-section in a plane in the region of its base, and

Figure 2 shows the fruit press as per Figure 1 in a perspective view.

A fruit press 1 has a centrally arranged element 2, which substantially has the shape of a rotational parabola, a hemisphere or a cone, and which is enclosed on its base by an annular surface 3. In the annular surface 3 the fruit juice gathers, which comes from squeezing a fruit above the element 2. The fruit juice drips into a container (not shown here), where it gathers, through slots 4 arranged like ribs.

The element 2 is substantially designed as a hollow body, in which a hollow shaft 5 is arranged centrally

and projects to a tip 6 of the element. The hollow shaft 5 preferably has the cross-section of an n-angle, for example a hexagon for positively taking up a journal of a drive shaft, and a corresponding edged wall 7.

Walls 8 adjoin the wall 7 at a right angle. The walls 8 act as reinforcing ribs and adjoin an outer wall 8 of the element 2. On its external wall, i.e. on its outer surface, the outer wall 8 bears helically arranged ridges 9, which in each case run from the base of the element 2, i.e. from the level of the annular surface 3, up to the tip 6. Between the ridges 9 lie troughs 10, via which the fruit juice flows to the annular surface 3.

The result of the ridges 9 being arranged in spirals on the element 2 is that the element 2 penetrates particularly easily into the fruit, in particular, if the fruit press is driven by motor in the same direction, in which the direction of rotation of the ridges also lies. The walls of the cells of the fruit, which guide the juice, are easily torn away by the ridges 9 having a sharp form, to let the fruit juice drip out.

It is understood that the form of the element 2 is also suitable for fruit presses not operated by motor and not revolving.